

The Status of Seals in the Gulf of Mexico

WITH A RECORD OF FERAL OTARIID SEALS OFF
THE UNITED STATES GULF COAST

by

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ABSTRACT

The only seal native to the Gulf of Mexico and the Caribbean area is the West Indian seal (family Phocidae). It is tan on the upper surface and a yellowish white underneath. It is now extinct or nearly so. Two seals were reported in Louisiana near the mouth of the Mississippi in January 1966. Photographs of one animal taken from a helicopter showed an otariid seal. In late June a light colored otariid seal began to reside on the buoys of the ship channel leading into Mobile Bay. It stayed there about two and a half weeks. The animal was a light tan in color and was a female, with a large healing scar on the right side. It was formerly reported from buoys off Cedar Key, Florida, and a newspaper photo verified that account. The animal was similar in all respects to the California sea lion. It washed up on the beach of the Chandeleur Islands of Louisiana with a bullet hole in it and badly decomposed on 11 August 1966. On 3 April 1967 another sea lion, possibly the second Louisiana specimen, was photographed off Pensacola. Five verifiable records of the California sea lion in the Atlantic have been reported ranging from Louisiana to Newfoundland. Probably man was always involved in their transportation. The California sea lion can probably establish self-sustaining populations in the Atlantic Ocean.

INTRODUCTION

The decimation and virtual extermination of the West Indian seal *Monachus tropicalis* (Gray) has been reviewed by G. M. Allen (1942), Kellogg (1943), Moore (1953), and Gunter (1954). The last specimen was taken in 1922 (Townsend 1923) near Key West and since that time there have only been sight records on the Texas coast, one in 1932 (Gunter 1947) and one, which was reported only in an issue of a local weekly newspaper, The Rockport Pilot, printed 29 April 1957. This concerned a lone animal seen on the beach of Bolivar Peninsula east of Galveston by an "amateur naturalist," William K. Reynolds of New Jersey. Gilmore (1959) reviewed reported sightings in the Caribbean region in the early fifties. Teeth have been found from

two historic sites in South Texas, twenty miles inland from the mouth of the Nueces River and the Spanish mission "La Bahia" at Goliad (Raun 1964). These sites were also inhabited by Indians, and the teeth could have been trade items and not native to Texas, as the author pointed out.

Allen, Moore and Gunter have separately expressed hope that some remnant of the Caribbean seal, as it is also called, still survives, but several other authors have listed it as probably extinct. For that reason a report of seals in the Gulf of Mexico or the West Indies is a matter of intense interest to zoologists and conservationists.

Recent Information on Seals in the Northern Gulf

a. Louisiana

The writer was greatly intrigued by recurring reports of seals near the mouth of the Mississippi River during January 1966. The reports came from an area east of the river, now a part of one of the largest oil fields on Earth, where boat travel is extensive and there is a considerable resident population of men on anchored vessels.

The first notice came from employees of the California Company who reported two seals near the Chandeleur Islands. The account was published in the New Orleans Times-Picayune on 28 January 1966. Doubts were expressed in the same article by a public aquarium manager, who said that the "seals" were probably "nutria," which would have a poor resemblance at best. The writer was not so skeptical and immediately issued a public plea for the seals not to be harmed because they might be the nearly extinct West Indian seal. However, the next day the same paper published a picture of an animal hauled out on the Chandeleur Island beach—taken from a hovering helicopter. The picture was not very good, but it portrayed a light colored animal with the black flippers of an otariid seal showing plainly. This picture was quite disconcerting to me, because I had been looking for a phocid seal—*Monachus*—and particularly not a blond sea lion in the Gulf of Mexico superficial in appearance to *Monachus*. Be that as it may, I kept my own counsel and tried to get more information.

Parenthetically, it should be noted that the fall and winter of 1965-66 on the northern Gulf coast were salubrious and warm for the first five months and there was nothing climatic to raise doubts about sub-tropical seals in the area.

At the end of January a cold wave struck. Following that I visited the area of various anchored LSMs and LSTs, used as quarters by oil field crews, near the mouth of the River. It was not surprising that the seals were gone, but the information was elicited that two seals had been seen, that they commonly rested on top of anchor buoys of the boats, and appreciated handouts of food.

Later, California Oil Company employees stated that several seals were to be seen at the "Magnolia Tank Battery," and that I would be taken out to see them by helicopter, as soon as they stayed long enough in one place. I was in distrust of a whole herd of seals and when nothing more was heard I gave up the quest.



Plate 1. An otariid seal on a bell buoy off the mouth of Mobile Bay taken 1 July 1966.



Plate 2. Rear view of the same seal shown in Plate 1.

b. Alabama

On 1 July 1966 The Mobile Press Register showed a picture of a seal on a channel buoy just south of Sand Point Light, the lighthouse for Mobile Bay, Alabama. It was stated that this same seal had recently been seen off Cedar Key, Florida. I later learned that it was recognizable because of a scar about the right fore flipper.

Dr. William Robertson, of the Everglades National Park Staff, later furnished me with a newspaper clipping on this animal, taken from The Miami Herald, 28 April 1966. A photograph was shown with a caption stating that the animal was resting on a channel buoy twenty miles southwest of Cedar Key.

I arranged by telephone on July 1 to be conveyed to the Mobile ship channel entrance by members of the University of Alabama and the Alabama Marine Resources Laboratory at Dauphin Island. We arrived at the channel buoys at 10:30 a. m. The seal was not to be found at the inshore buoys where it had been previously seen, but by intercom a party boatman told us it was on No. 2 buoy, which lies just inside the sea buoy or outside marker. So it was, and there lay a handsome yellowish lady seal with large, lacrymating brown eyes.

This animal was sleepy and torpid and barely roused up as we cruised around the buoy to get photographs. The dark area of the fur as shown in the pictures is where the animal was wet. The lighter dry area was a very light tan or dark cream. Rear view pictures showed the distinct tail separate from the body and also showed the absence of a scrotal sack which should be visible in the male eared seals. The black hind flippers showed the prolongation of the outer phalange also characteristic of these seals, and it showed that the flippers may be turned forward and that they are not spatulate. The ears of this animal are quite visible in the photographs. The animal had a long yellow mustache with hairs all in a line and not so closely bunched together as they are in the phocid seals.

The animal had a large healing wound, lunate shaped in its upper margin, which went through the skin and the blubber and into the muscles underneath. It appeared to be granulated and healing well. At first glance one might take this as the bite of a shark, but the lower tooth marks were not discernible and possibly this wound was caused by a boat propellor.

The animal seemed to be quite tame and only roused up when we got very close, which at the closest must have been at ten to fifteen feet. It appeared to be about five feet in length. It reposed quite well on the bell buoy which was clanging loudly just over its back.

There is no doubt that the Mobile seal belonged to the family Otariidae or eared seals, and I do not have much hesitation in saying that it was a California sea lion. Dr. Robert T. Orr, of the California Academy of Sciences, concurs in that opinion after examining the photographs. Here only one photograph is shown (Plate 1).

This seal resided on the buoys off the mouth of Mobile Bay for about eighteen days and the personnel of the Seafoods Division of the Alabama Department of Conservation made an attempt to keep

up with it. Sports fishermen and charter boat operators visited the seal and fed it fish.

This seal was reported dead and badly decomposed with a bullet hole in it, washed up on the beach of the Chandeleur Islands on 11 August 1966. The discovery was made by a commercial fisherman and charter boatman who recognized the animal by its identifying scar. He gave the information to Mr. George Allen, Director of the Alabama Seafoods Division, who relayed it to me. *Sic semper innocentibus.*

Acknowledgments

I am indebted to several people at the Alabama Marine Resources Laboratory for assistance. Mr. Walter Nelson arranged for the boat trip and Messrs. Fred Reese, Alfred McNutt and John Bell, Jr., took me out. Mr. Reese took the photograph shown here. Mr. C. E. Dawson made the enlargement from the negative. I am also indebted to Dr. William B. Robertson, of the Everglades National Park, for the information from The Miami Herald.

After the above words were written Mr. Jack I. Lowe, of the U. S. Bureau of Commercial Fisheries, wrote the author in a letter dated 5 April 1967, enclosing an article and a picture of another California sea lion female on a channel buoy, the No. 6 buoy, out of Pensacola, as presented in The Pensacola News, 3 April 1967. This possibly accounts for the second animal reported by the offshore oil-field workers in Louisiana, but nothing further has been heard.

Dr. C. O. Handley, of the U. S. National Museum, told me there were reports of a "seal," presumably a California sea lion, off Norfolk, Virginia, a few years ago, circa 1964-65. Dr. H. D. Hoese, then of the University of Georgia, Sapelo Island, told me of one reported at Savannah, Georgia, three years ago. This all recalled to my mind that Mr. F. G. Wood, then of Marineland, Florida, told me of the escape of a male from Marineland, somewhere between 1938 and 1942, which made its way to Miami and lived there for several weeks under the sports fishermen docks. When a female was taken down with which to entice him back into captivity, the reverse happened and both animals lived free for several weeks until recaptured. This was all hearsay with Mr. Wood, but he and his crew captured a juvenile male California sea lion at Crescent Beach, Florida, in 1957-58. They never found out where it came from originally. It was given the name Sam and was kept at Marineland, Florida, for a time. This was confirmed in a telephone conversation with Mr. Wood on 8 December 1967. He is now Head of the Bioscience Facility of the Naval Undersea Warfare Center at Point Mugu, California.

The first published record of the California sea lion, *Zalophus californianus*, on the Atlantic coast, other than newspaper accounts, was given by Layne (1965) who reported a specimen from Florida, which he considered to be an escapee from a zoo. Mercer (1967) re-

ported the body measurements and skull measurements of an animal killed on the east coast of Newfoundland on 22 July 1965.

Summary and Conclusions

At least four California sea lions living wild and free on the Atlantic coast have been reported during the past twenty-five years. These reports are, however, not verifiable. On the other hand verifiable records, of live or dead specimens, or indubitable sight records and photographs are available for five specimens of California sea lions on the Atlantic Coast of North America, ranging from Louisiana to Newfoundland during the past ten years.

The two specimens first seen in Louisiana in January 1966 apparently account for later sightings off Cedar Keys and Pensacola, Florida, and Mobile, Alabama. Except for the Panama Canal, which is not near either one of the eastern Pacific subpopulations or subspecies of *Zalophus californianus*, there has been no recent change in geographic barriers to movement of this sea lion into the Atlantic Ocean. Therefore, the specimens found there must have been aided in their movements somehow by man.

The ability of California sea lions to live feral for months in the warm and temperate waters of the United States Atlantic Coast suggest that they could establish self-sustaining populations there.

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Effects of Predation On Infaunal Invertebrates Of Alligator Harbor, Florida *

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ABSTRACT

A study of the effect of predation on infaunal invertebrates was carried out from July, 1965, to January, 1966, within the intertidal zone of Florida State University Marine Laboratory area at Alligator Harbor, located on the Northeast Gulf of Mexico. The animals were offered protection by wire-baskets of three different mesh sizes. Out of 1,112 infaunal invertebrates, 800 were recovered inside and 312 outside the baskets. The polychaetes, nemertines, phoronids, amphipods and bivalves made up the infauna; the polychaetes comprised the major part of it. Out of 34 species of polychaetes, six are reported from this area for the first time. The spawning period of two species of polychaetes and one gastropod was also observed, and the seasonal abundance of all polychaetes was noted. The depth preference of infaunal organisms was determined.

INTRODUCTION

Effect of predation on infaunal invertebrates has been a relatively neglected area of research. Practically no work has been done in the Gulf of Mexico, or for that matter in the United States in general. The only treatment available (Darnell 1958) deals with the predation of fishes, some shrimp and the blue crab, *Callinectes sapidus*, on infaunal but especially epifaunal invertebrates. Carikker (1951) observed the predation by *Busycon canaliculatum*, *B. carica*, *Urosalpinx cinerea*, *Polinices duplicata*, and *Callinectes sapidus*, on the infaunal bi-